## What is Claimed is:

A method of facilitating communications in a network comprising:
 receiving a message from a mobile unit having a contact address;
 establishing a contact alias associated with the mobile unit and the contact address;
 intercepting and identifying at least one signaling message that includes the contact
alias;

compressing the at least one signaling message that includes the contact alias; and routing the compressed at least one signaling message to the mobile unit with the contact address.

2. The method of claim 1 further comprising: intercepting and identifying at least one later signal message for the mobile unit; not sending a second message corresponding to the at least one later message to the mobile unit;

generating a response message in response to receiving the at least one later message; and

sending the response message to a server.

- 3. The method of claim 1 wherein the message from the mobile unit is one of a SIP REGISTER message, a SIP INVITE message; a SIP OK message; a SIP OPTIONS message; and a SIP BYE message.
- 4. The method of claim 1 further comprising decompressing a signaling message received from the mobile unit and forwarding the decompressed signaling message to a server.
- 5. The method of claim 1 wherein receiving the message from the mobile unit having a contact address, comprises receiving a registration message that includes an indication that the mobile unit processes compressed messages.
- 6. The method of claim 1 wherein receiving the message from the mobile unit having a contact address, includes receiving a capabilities header indicating an ability to process compressed messages.

- 7. The method of claim 1 further comprising advertising the presence of a proxy for signaling message compression to the mobile unit.
- 8. The method of claim 1 wherein the step of intercepting and identifying a signaling message includes intercepting and identifying a SIP message.
- 9. A method of compressing communications comprising: transmitting a message with a contact address from a mobile unit; receiving the message with a contact address from the mobile unit having the contact address:

establishing a contact alias associated with the mobile unit and the contact address; and

intercepting and identifying at least one SIP message that includes the contact alias.

10. The method of claim 9 further comprising:

compressing the at least one SIP message that includes the contact alias to obtain at least one compressed message;

routing the at least one compressed message to the mobile unit with the contact address; and receiving the at least one compressed message at the mobile unit.

- 11. The method of claim 9 wherein the message with the contact address is one of a SIP REGISTER message; a SIP INVITE message; a SIP OK message; a SIP BYE message; and a SIP OPTIONS message.
- 12. The method of claim 9 further comprising decompressing a SIP message received from the mobile unit and forwarding the decompressed SIP message to a server.
- 13. The method of claim 9 wherein the message with the contact address includes an indication that the mobile unit processes compressed messages.
- 14. The method of claim 9 further comprising advertising the presence of the proxy for SIP message compression to the mobile unit.

- 15. The method of claim 9 further comprising receiving authentication information from the mobile unit to facilitate authentication of a mobile unit.
- 16. The method of claim 10 wherein the at least one compressed message is a legacy cellular call setup message.
- 17. A device for facilitating communications in a network comprising: an alias register storing a contact alias associated with a contact address of a mobile unit;
- a SIP register storing a SIP message, the message identifiable as being destined for the contact alias associated with the contact address of the mobile unit; and
- a controller coupled to the alias register and the SIP register and having an output, the controller compressing the SIP message in the SIP register and placing the compressed SIP message on the output.
- 18. The apparatus of claim 17 wherein the controller comprises means for transmitting the compressed SIP message at the output to the mobile unit.
- 19. The apparatus of claim 17 wherein the controller comprises means for receiving SIP messages destined for the mobile unit.
- 20. The apparatus of claim 17 wherein the controller comprises means for determining and forming the contact alias in the alias register.
- 21. The apparatus of claim 20 wherein the controller forms the contact alias such that it contains the contact address information.
- 22. The apparatus of claim 18 wherein the controller comprises means for compressing and routing the SIP messages to the mobile unit upon a determination that the SIP message is destined for the mobile unit.